

Docket No. 08CS5966-2

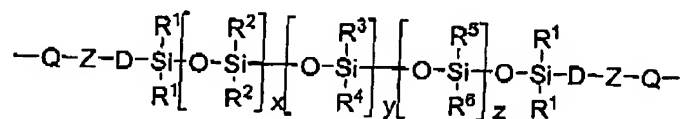
Remarks

Claims 3, 5-8, 18, 20, and 31-33 are pending in the present application. Reconsideration and allowance of the claims is respectfully requested in view of the above amendments and the following remarks.

1. Claim Rejections Under 35 U.S.C. § 102(b)

Claims 3 and 6-7 stand rejected under 35 U.S.C. § 102(b), as allegedly anticipated by Berger, U.S. Patent No. 4,499,149. In response to the prior Office Action Applicants delineated the differences between compositions of Berger and the instantly claimed compositions. These differences primarily focused on the identity of the pendant and terminal groups of the disclosed polysiloxanes. In responding to the Applicants' arguments presented in the last amendment, the Examiner has asserted that the "additional functional groups at the terminal ends of the siloxane moiety are the polyurethane units" (Page 6 of the pending Office Action) of Berger's polysiloxane chemically bound to a polyurethane. The Applicant respectfully traverses this rejection.

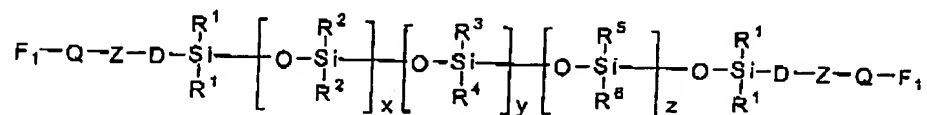
Berger generally discloses polymeric compositions containing polysiloxane units of the formula



where Q is a substituted or unsubstituted aromatic group; Z is -O-, -S-, -S(O)-, -S(O)₂-, -S(O)₂NH-, -NHS(O)₂-, -C(O)NH-, -NHC(O)-, -C(O)O-, or -OC(O)-; D is unsubstituted or substituted hydrocarbylene; R¹, R², R³, R⁴, R⁵, and R⁶ each, independently, is unsubstituted or substituted hydrocarbyl; and x, y and z each independently has a value from 0 to 100. (Col. 2, lines 1-31, emphasis added) Applicants assert, as discussed below, that the polysiloxane unit of Berger includes the entirety of the above formula and the above formula does not include any units of the polymer to which the polysiloxane may be bound. Support for this assertion can be found in the manner in which the polysiloxane unit is bound to or incorporated into the polymer. Beginning at Col. 3, line 9, Berger teaches that the

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polysiloxane unit of the above formula is derived from a bis(functional) polysiloxane of the formula



where F_1 is a functional group attached directly to Q or bonded via an intermediate aliphatic group. F_1 can be any one of a group of highly reactive species. The appropriately functionalized bis(functional) polysiloxane is then reacted with the appropriate monomers to form the polymer having the incorporated polysiloxane unit. This is described with regard to polyimides beginning at Col. 16, line 38 where the bis(amino)polysiloxane is reacted with a dianhydride. Similarly it is described with regard to polyamide-imides beginning at Col. 39, line 13, with regard to polycarbonates beginning at Col. 41, line 26, with regard to polyphenylene sulfide beginning at Col. 42, line 52, and with regard to polysulfone beginning at Col. 44, line 5, just to name some of the described polymers. In each case, the chemical variable Z is included as part of the polysiloxane unit and is not part of the reactive moiety that links the polysiloxane unit to the remainder of the polymer. Thus it is clear that Z is part of the terminal moiety of the polysiloxane unit, not the bonded polymer as the Examiner has asserted. Thus the Applicants believe that their assertion that Berger does not teach a silicon compound having only hydrocarbon functionality at the terminal silicon atoms is correct. Berger teaches a polysiloxane that contains functionality at the terminal ends of the siloxane moiety besides hydrocarbon (see the Z group: $-O-$, $-S-$, $-S(O)-$, $-S(O)_2-$, $-S(O)_2NH-$, $-NHS(O)_2-$, $-C(O)NH-$, $-NHC(O)-$, $-C(O)O-$, or $-OC(O)-$). Since the element requiring silicone compounds that contain only hydrocarbon functionality or silicone compounds requiring only hydrocarbon functionality at the terminal silicon atoms is not taught by Berger, Claims 3 and 6-7 are not anticipated by that reference.

Accordingly, the Applicant respectfully requests reconsideration and removal of the 35 U.S.C. § 102(b) rejections of Claims 3 and the dependent Claims 6-7.

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4. Claim Rejections Under 35 U.S.C. § 103(a)

Claims 8 and 31 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Berger.

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a *prima facie* case of obviousness, i.e., that all elements of the invention are disclosed in the prior art. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In Re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970); *Amgen v. Chugai Pharmaceuticals Co.*, 927 U.S.P.Q.2d, 1016, 1023 (Fed. Cir. 1996).

Both Claims 8 and 31 require one of two types of silicone compounds which are not disclosed in Berger. Claims 8 and 31 both require a silicone compound containing only hydrocarbon functionality pendant from the silicon atoms of the silicone compound, or a silicone compound requiring hydrocarbon functionality at the terminal silicon atoms of the molecule (see R⁹, R¹⁰, R¹³, R¹⁴, R¹⁵, and R¹⁶) as detailed above. The silicone compounds of the Claims are chemically distinct from the polysiloxanes described in Berger. As mentioned above, the polysiloxanes as taught by Berger have functionality at their terminal ends and this functionality is not part of the bound polymer as suggested by the Examiner. The functionality is used to link the polysiloxane to polymers, such as polyimides but is not part of the linked polymer. One of ordinary skill in the art would not be motivated to modify Berger's polysiloxanes to remove the functionality or to shift the functionality away from the terminal ends of the polysiloxane. As Berger fails to teach or suggest either of these two types of silicone compounds, Claims 8 and 31 have not been rendered obvious. Accordingly, the Applicant requests reconsideration and removal of the § 103(a) rejections to Claims 8 and 31.

Claims 3, 5-8, 18, 20, and 31 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Anderson et al., U.S. Patent No. 5,932,405 (hereinafter "Anderson"), in view of Berger.

Anderson generally discloses a photographic element which includes a support, at least silver halide light sensitive layer superposed on the support, and an outermost protective

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overcoat superposed on the support. The protective overcoat includes a water dispersible siloxane-containing polyurethane.

The Examiner has stated, "Anderson does not disclose the same silicon compounds as recited in claims 3 and 18." (Office Action dated 6/5/2003, page 7) The Applicant agrees with that statement. The Examiner further stated, "the composition [of Berger] comprises the same material as claimed in claims 3 and 18." (Id.) The Applicant respectfully disagrees that Berger teaches the same siloxane compounds as required by independent Claims 3 and 18. As described above, Berger's polysiloxane compounds do not teach or suggest either one of two types of silicone compounds required by the claims: a silicone compound containing only hydrocarbon functionality pendant from the silicon atoms of the silicone compound, or a silicone compound requiring hydrocarbon functionality at the terminal silicon atoms of the molecule (see R⁹, R¹⁰, R¹³, R¹⁴, R¹⁵, and R¹⁶) as detailed above. As Berger fails to teach or suggest either of these two types of silicone compounds, independent Claims 8 and 31 have not been rendered obvious. Accordingly, the Applicant requests reconsideration and removal of the § 103(a) rejections for Claims 3 and 18 and dependent Claims 5-8, 20, and 31.

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It is believed that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein should now be allowable to the Applicant. Accordingly, reconsideration and allowance is requested.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 07-0862 maintained by Assignee.

Respectfully submitted,

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